

GENERAL NOTES:

1. APPROVAL OF THESE PLANS BY THE DIRECTOR OF PUBLIC WORKS DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL *A PERMIT AND/OR *A NOTICE TO PROCEED HAS BEEN ISSUED. THE CONTRACTOR SHALL CONTACT THE CITY OF RANCHO PALOS VERDES ENGINEER TO ARRANGE FOR AN ACCEPTABLE CONSTRUCTION START DATE.
2. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARK-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE CITY OF RANCHO PALOS VERDES DEPARTMENT OF PUBLIC WORKS 30940 HAWTHORNE BLVD. RANCHO PALOS VERDES, AT LEAST 5 WORKING DAYS PRIOR TO STARTING WORK UNDER THIS CONTRACT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE CITY OF RANCHO PALOS VERDES DOES NOT AUTHORIZE THE CONTRACTOR TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.)
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, A LAND SURVEYOR SHALL REPLACE SUCH MONUMENTS WITH APPROPRIATE MONUMENTS. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT, SECTION 8771 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE DIRECTOR OF PUBLIC WORKS MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ALL DAMAGE FROM STORMWATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY OR ALL WORK IN CONNECTION WITH CONSTRUCTION. CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENT CONTROLS DURING THE PROJECT'S CONSTRUCTION ACTIVITIES. THE CONTROLS SHALL MEET ALL APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD AND THE CITY OF RANCHO PALOS VERDES MUNICIPAL CODE AND STORM WATER STANDARDS.
6. DEVIATIONS FROM THESE SIGNED PLANS WILL NOT BE ALLOWED UNLESS A CONSTRUCTION CHANGE IS APPROVED BY THE DIRECTOR OF PUBLIC WORKS OR THE AUTHORIZED REPRESENTATIVE, OR THE CHANGE IS REQUIRED BY THE CITY INSPECTOR.
7. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE DIRECTOR OF PUBLIC WORKS PRIOR TO ACCEPTANCE OF THIS PROJECT.

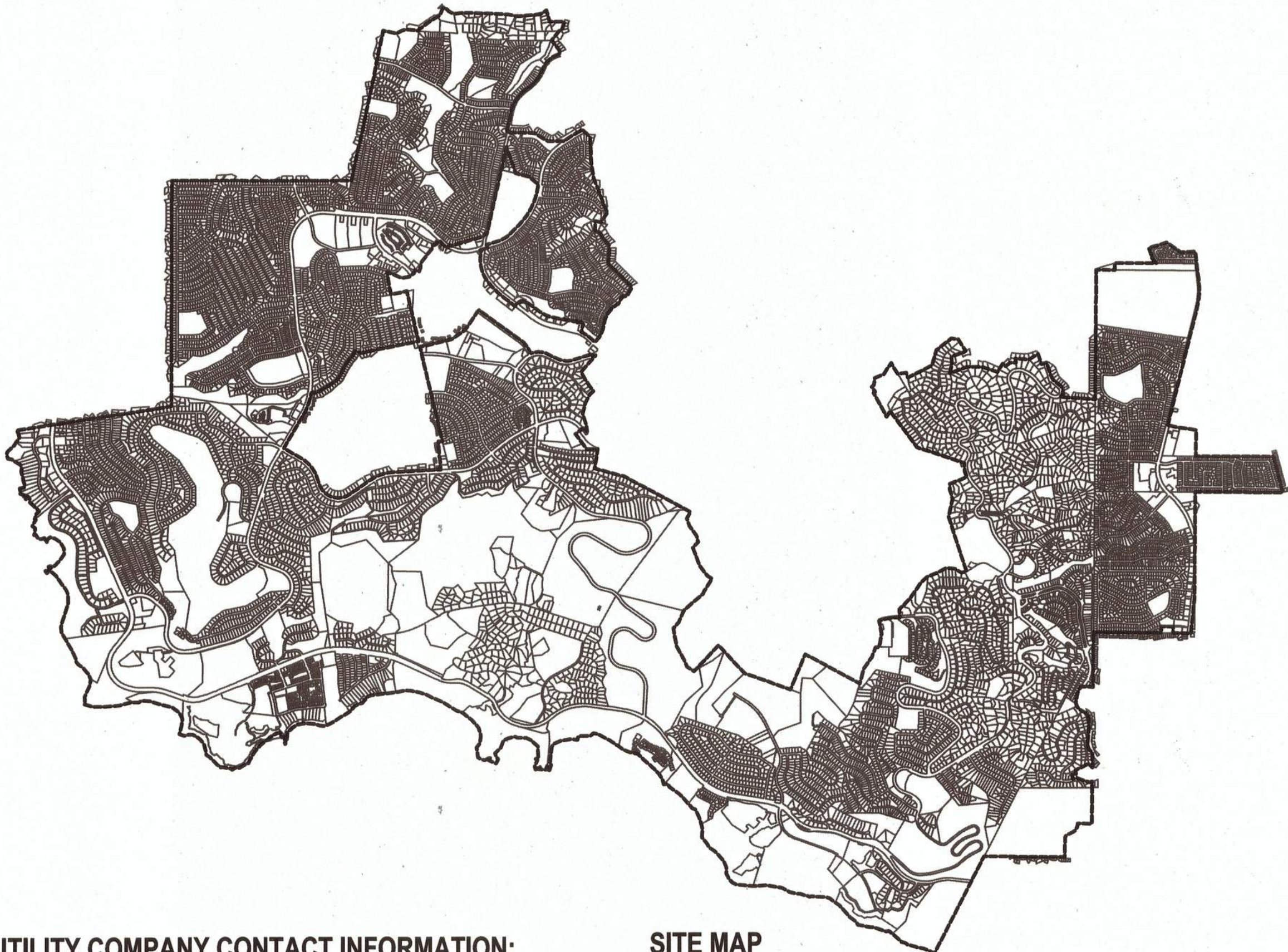
EROSION AND SEDIMENT CONTROL NOTES:

1. DISCHARGING SEDIMENT-LADEN WATER WHICH WILL CAUSE OR CONTRIBUTE TO AN EXCEEDANCE OF THE APPLICABLE RWQCB'S BASIN PLANS FROM A DEWATERING SITE OR SEDIMENT BASIN/TRAP INTO ANY RECEIVING WATER OR STORM DRAIN WITHOUT FILTRATION OR EQUIVALENT TREATMENT IS PROHIBITED.
2. TEMPORARY ON-SITE DRAINAGE TO CARRY CONCENTRATED FLOW SHALL BE SELECTED TO COMPLY WITH CITY REQUIREMENTS TO CONTROL EROSION. TO RETURN FLOWS TO THEIR NATURAL DRAINAGE COURSES, AND TO PREVENT DAMAGE TO DOWNSTREAM PROPERTIES.
3. SEDIMENT CONTROL BMP'S ARE REQUIRED AT APPROPRIATE LOCATIONS ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL INLETS TO THE STORM DRAIN SYSTEM AT ALL TIMES.
4. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND SHALL NOT CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS SHALL BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS SHALL NOT BE WASHED INTO THE STORM DRAIN SYSTEM.
5. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
6. WEATHER AND STORM PREDICTIONS CAN BE OBTAINED BY CALLING THE NATIONAL WEATHER SERVICE AT (805) 988-6610 OR BY VISITING THE NATIONAL WEATHER SERVICE WEB SITE AT HTTP://WWW.WRH.NOAA.GOV/LOX/ FOR WEATHER INFORMATION AND CURRENT SATALITE/RADAR FEEDS.
7. TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW.
- A. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET.
- B. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
- C. STOCKPILES OF SOIL AND OTHER CONSTRUCTION RELATED MATERIALS SHALL BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY EITHER WIND, RAINWATER OR STORMWATER.
- D. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCES ROADWAYS MUST BE STABILIZED TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC STREET. ACCIDENTAL TRACK-OUT MUST BE SWEEP UP IMMEDIATELY AND SHALL NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- E. INSPECTIONS SHALL BE PERFORMED BEFORE AND AFTER STORM EVENTS AND ONCE EACH 24-HOUR PERIOD DURING EXTENDED STORM EVENTS TO IDENTIFY BMP EFFECTIVENESS AND IMPLEMENT REPAIRS OR DESIGN CHANGES AS SOON AS FEASIBLE, DEPENDING ON FIELD CONDITIONS, EQUIPMENT, MATERIALS, AND WORKERS MUST BE AVAILABLE FOR RAPID RESPONSE TO FAILURES AND EMERGENCIES. ALL CORRECTIVE MAINTENANCE TO BMP'S SHALL BE PERFORMED AS SOON AS POSSIBLE AFTER THE CONCLUSION OF EACH STORM, DEPENDING UPON WORKER SAFETY.
- F. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
- G. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
- H. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS OR THE AUTHORIZED REPRESENTATIVE, AFTER EACH RUN-OFF PRODUCING RAINFALL.
- I. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION/SEDIMENT CONTROL MEASURES AS MAY BE REQUIRED BY THE DIRECTOR OF PUBLIC WORKS OR THE AUTHORIZED REPRESENTATIVE, DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
- J. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
- K. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS OR THE AUTHORIZED REPRESENTATIVE.
- L. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
- M. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
- N. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER AND SEWER UTILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.
- O. A CONCRETE WASHOUT SHALL BE INSTALLED FOR ALL PROJECTS THAT PROPOSE CONCRETE TO BE MIXED ON SITE OR DELIVERED FROM A BATCH PLANT. THE CONCRETE WASHOUT SHALL BE LOCATED A MINIMUM OF 50' FROM ANY DRAINAGE INFRASTRUCTURE OR NATURAL DRAINAGE FEATURES OR WATER BODIES AND INCORPORATE AN IMPERMEABLE LINER (6 MIL MIN) TO CONTAIN THE REQUIRED VOLUME. ALL DRIED CONCRETE WASTE SHALL BE BROKEN INTO MANAGEABLE PIECES AND DISPOSED OF IN A PROPER MANNER. THE CONTRACTOR OR QUALIFIED PERSON SHALL LOCATE CONCRETE WASHOUTS IN THIS PRESCRIBED MANNER AS CONSTRUCTION PROGRESSES.
8. THE FOLLOWING BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, THE CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) CONSTRUCTION HANDBOOK, (JANUARY, 2003) MAY APPLY DURING CONSTRUCTION (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY THE DIRECTOR OF PUBLIC WORKS OR THE AUTHORIZED REPRESENTATIVE). THE ENTIRE CASQA BMP HANDBOOK CAN BE FOUND AT: HTTP://WWW.CABMPHANDBOOKS.COM/
- EC-1 SCHEDULING
EC-2 PRESERVATION OF EXISTING VEGETATION
EC-4 HYDROSEEDING
SE-5 FIBER ROLLS
SE-6 GRAVEL BAG BERM
SE-10 STORM DRAIN INLET PROTECTION
WE-1 WIND EROSION CONTROL
NS-1 WATER CONSERVATION PRACTICES
NS-2 DEWATERING OPERATIONS
- NS-3 PAVING AND GRINDING OPERATIONS
NS-6 ILLICIT CONNECTION/DISCHARGE
NS-7 POTABLE WATER/IRRIGATION
NS-8 VEHICLE AND EQUIPMENT CLEANING
NS-9 VEHICLE AND EQUIPMENT FUELING
NS-10 VEHICLE & EQUIPMENT MAINTENANCE
NS-12 CONCRETE CURING
NS-13 CONCRETE FINISHING
WM-1 MATERIAL DELIVERY AND STORAGE
- WM-2 MATERIAL USE
WM-3 STOCKPILE MANAGEMENT
WM-4 SPILL PREVENTION AND CONTROL
WM-5 SOLID WASTE MANAGEMENT
WM-6 HAZARDOUS WASTE MANAGEMENT
WM-7 CONTAMINATED SOIL MANAGEMENT
WM-8 CONCRETE WASTE MANAGEMENT
WM-9 SANITARY/SEPTIC WASTE MANAGEMENT
WM-10 LIQUID WASTE MANAGEMENT
9. SEE PROJECT SPECIFICATIONS FOR NPDES COMPLIANCE / WATER POLLUTION CONTROL FOR FURTHER DETAILS. CONTRACTOR RESPONSIBLE FOR THE IMPLEMENTING THE STORMWATER BEST MANAGEMENT PRACTICES AS PART OF THESE CONSTRUCTION DOCUMENTS.

CITY OF RANCHO PALOS VERDES

TRANSIT IMPROVEMENTS TURNOUT STATIONS

PROJECT #8824



UTILITY COMPANY CONTACT INFORMATION:

CITY OF RANCHO PALOS VERDES	(310) 544-5252
SOUTHERN CALIFORNIA EDISON COMPANY	(310) 783-1156
SOUTHERN CALIFORNIA GAS COMPANY	(310) 687-2020
VERIZON	(310) 793-4159
CALIFORNIA WATER SERVICE COMPANY	(310) 541-2438
COX COMMUNICATIONS	(310) 551-5020 x30
COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS (STORM DRAIN)	(626) 458-3109
COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS (SEWER)	(626) 458-4357
SANITATION DISTRICT OF LOS ANGELES COUNTY	(562) 699-7411 x1205
USA	(800) 227-2600

ABBREVIATIONS:

AC	ASPHALT CONCRETE	PB	PULLBOX
C/L	CENTERLINE	PROP	PROPOSED
CB	CATCH BASIN	R/W	RIGHT OF WAY
CLF	CHAIN LINK FENCE	RPV	RANCHO PALOS VERDES
DWG	DRAWING	RHE	ROLLING HILLS ESTATE
E'LY	EASTERLY	S/W	SIDEWALK
EC	END CURVE	SDMH	STORM DRAIN MANHOLE
EG	EXISTING GRADE	SP	SIGN POST
EL	ELEVATION	STA	STATION
EP	EDGE OF PAVEMENT	STD	STANDARD
EPB	ELECTRIC PULL BOX	TC	TOP OF CURB
EX	EXISTING	T/VLT	TELEPHONE VAULT
FDC	FIRE DEPARTMENT CONNECTION	VLT	VAULT
FP	FINISH PAVEMENT	W	WATER
FG	FINISHED GROUND	WDF	WOOD FENCE
FS	FINISH SURFACE	WMB	WATER METER BOX
HP	HIGH POINT	WV	WATER VALVE
IRR	IRRIGATION	PVPTA	PALOS VERDES PENINSULA TRANSIT AUTHORITY
MH	MANHOLE, UNKNOWN TYPE	PVPHS	PALOS VERDES PENINSULA HIGH SCHOOL
NTS	NOT TO SCALE		

SITE MAP

NTS

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
1	TITLE SHEET
2	KEY MAP
3	TABLE BY NUMBER
4	TABLE BY NUMBER CONTINUED AND TABLE BY IMPROVEMENTS
5	DETAILS
6	DETAILS
7	BUS STOP LOCATION MAP
8	BUS STOP LOCATION MAP
9	BUS STOP LOCATION MAP
10	BUS STOP LOCATION MAP
11	BUS STOP LOCATION MAP
12	BUS STOP LOCATION MAP

LEGEND:

CITY BOUNDARY	-----
PROPERTY LINE	-----
CENTERLINE	-----
SIDEWALK PER CITY GIS	-----



TRAFFIC CONTROL NOTES:

1. FOR WORK ON ALL RESIDENTIAL ROADWAYS, THE TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CA MUTCD.
2. FOR TRAFFIC CONTROL ON NON-RESIDENTIAL ROADWAYS, THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS PREPARED/STAMPED BY A LICENSE ENGINEER TO BE REVIEWED AND APPROVED BY THE CITY PRIOR TO STARTING ANY WORK ON NON-RESIDENTIAL ROADWAYS. FOR THE PURPOSES OF THIS SECTION THE FOLLOWING ROADWAYS WILL BE CONSIDERED NON- RESIDENTIAL ROADWAYS: SILVER SPUR, HAWTHORNE, PALOS VERDES DRIVE SOUTH, AND PALOS VERDES DRIVE EAST.
3. STANDARDS: THE TRAFFIC CONTROL PLAN SHALL CONFORM TO THE MOST RECENT ADOPTED EDITION OF EACH OF THE FOLLOWING MANUAL:
- CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
4. NOTIFICATIONS: THE CONTRACTOR SHALL NOTIFY THE CITY OF RANCHO PALOS VERDES DEPARTMENT OF PUBLIC WORKS A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO STARTING ANY WORK INVOLVING NIGHTTIME OR WEEKEND HOURS. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AND TENANTS A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO CLOSURE OF DRIVEWAYS. THE CONTRACTOR SHALL POST SIGNS NOTIFYING THE PUBLIC A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO CLOSURE OF STREETS. THE CONTRACTOR MUST RECEIVE APPROVAL FROM CITY FOR ANY WORK DURING THE WEEKEND OR AT NIGHT.
5. EXCAVATIONS: EXCEPT WHEN OTHERWISE SHOWN ON THE PLANS, ALL TRENCHES SHALL BE BACKFILLED OR TRENCH-PLATED AT THE END OF EACH WORKDAY. AN ASPHALT RAMP SHALL BE PLACED AROUND EACH TRENCH PLATE TO PREVENT THE PLATE FROM BEING DISLODGED. CONTRACTOR SHALL MONITOR TRENCH PLATES DURING NON-WORKING HOURS TO ENSURE THAT THEY DO NOT BECOME DISLODGED. UPON COMPLETION OF EXCAVATION BACKFILL, THE CONTRACTOR SHALL PROVIDE A SATISFACTORY SURFACE FOR TRAFFIC. WHEN CONSTRUCTION OPERATIONS ARE NOT ACTIVELY IN PROGRESS, THE CONTRACTOR SHALL MAINTAIN ALL TRAVEL LANES, BIKE LANES, AND PEDESTRIAN WALKWAYS IN THE RIGHT-OF-WAY EXCEPT WHEN OTHERWISE SHOWN ON THE PLANS.
6. RESTORATION OF ROADWAY: THE CONTRACTOR SHALL REPAIR OR REPLACE ALL EXISTING IMPROVEMENTS WITHIN RIGHT-OF-WAY NOT DESIGNATED FOR PERMANENT REMOVAL (TRAFFIC SIGNS, STRIPING, PAVEMENT MARKERS, PAVEMENT MARKINGS, LEGENDS CURB MARKINGS, LOOP DETECTORS, TRAFFIC SIGNAL EQUIPMENT, ETC.) WHICH ARE DAMAGED OR REMOVED AS A RESULT OF OPERATIONS. REPAIRS AND REPLACEMENTS SHALL BE ATLEAST EQUAL TO EXISTING IMPROVEMENT.
7. CHANGE IN WORK: THE DIRECTOR OF PUBLIC WORKS OR THE AUTHORIZED REPRESENTATIVE, RESERVES THE RIGHT TO OBSERVE THESE TRAFFIC CONTROL PLANS IN OPERATION AND TO MAKE ANY CHANGES AS FIELD CONDITIONS WARRANT. ANY CHANGES SHALL BE DOCUMENTED AND SUPERSEDED THESE PLANS. ANY DIRECTED CHANGES SHALL SUPERSEDE THESE PLANS AND SHALL BE IMPLEMENTED AT THE SOLE EXPENSE OF THE CONTRACTOR.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING WORK TO INSTALL AND MAINTAIN THE TRAFFIC CONTROL DEVICES AS SHOWN HEREIN, AS WELL AS ANY SUCH ADDITIONAL TRAFFIC CONTROL DEVICES TO ENSURE THE SAFE MOVEMENT OF VEHICULAR AND PEDESTRIAN TRAFFIC THROUGH OR AROUND THE CLOSURE AREA AND PROVIDE THE MAXIMUM PROTECTION AND SAFETY TO WORKERS.
9. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES AND SHALL BE REPAIRED, REPLACED OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.
10. THE CONTRACTOR SHALL REMOVE TEMPORARY DELINEATION, SIGNAGE, AND OTHER DEVICES WHEN NO LONGER REQUIRED, AND SHALL RESTORE AREAS TO ORIGINAL CONDITIONS.
11. THE CONTRACTOR SHALL COVER EXISTING SIGNS WHERE THEY CONFLICT WITH CONSTRUCTION DETOURS AND SIGNING (EXCEPT SPEED LIMIT SIGNS).
12. WORKING HOURS SHALL BE FROM 8AM TO 4PM, MONDAY THROUGH FRIDAY. WORK IS NOT PERMITTED ON WEEKENDS OR CITY HOLIDAYS.
13. THE CONTRACTOR SHALL PROVIDE FOR SAFE PEDESTRIAN ACCESS AT ALL TIMES.
14. FLASHING ARROW SIGNS SHALL BE SOLAR POWERED.
15. THE CONTRACTOR SHALL PROVIDE FLAGMEN AS INDICATED ON THE PLAN, AT ALL TIMES TRAFFIC CONTROL IS IN PLACE, TO GIVE ADEQUATE WARNING TO TRAFFIC OR TO THE PUBLIC OF ANY UNEXPECTED CONDITIONS TO BE ENCOUNTERED.
16. All OPEN EXCAVATION OR CONSTRUCTION WORK SHALL BE A MINIMUM OF 5' FROM ANY OPERATING TRAFFIC LANES.
17. CONTRACTOR SHALL POST UNEVEN PAVEMENT SIGNS, AND RAMP VERTICAL OFFSET OF 1 INCH OR MORE WITH ASPHALT FOR SMOOTH TRANSITIONAL SIGNS SHALL BE REFLECTORIZED AND STANDARD SIZE.
18. IMPLEMENTATION OF TRAFFIC CONTROL SHALL BE CONDUCTED BY A PROFESSIONAL TEMPORARY TRAFFIC CONTROL COMPANY AND FLAGGER CONTROL SHALL BE CONDUCTED IN ACCORDANCE WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (FHWA'S MUTOC, 2014 EDITION).



Know what's below.
Call before you dig.

ENGINEER'S NOTICE TO CONTRACTOR:

THE CONTRACTOR SHALL TAKE DUE PRECAUTIONS TO PROTECT ALL UNDERGROUND UTILITIES AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS.

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED	KR
DRAWN	SM
CHECKED	GS
DATE	1/30/19



PLANS PREPARED BY:

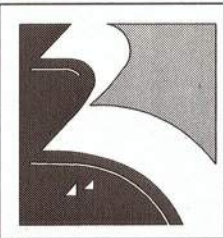


CITY OF RANCHO PALOS VERDES

[Signature] 12-6-19
PRINCIPAL/CITY ENGINEER DATE

APPROVED BY SENIOR ENGINEER, P.E. DATE

CITY OF RANCHO PALOS VERDES

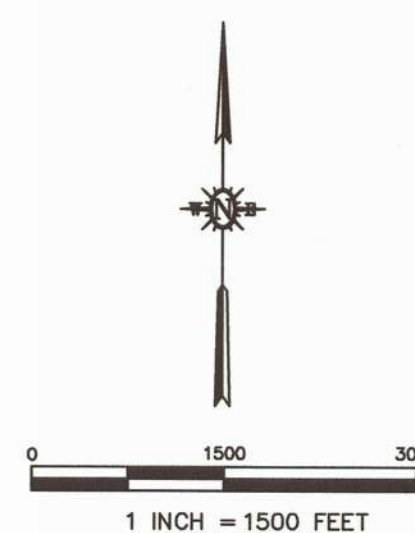
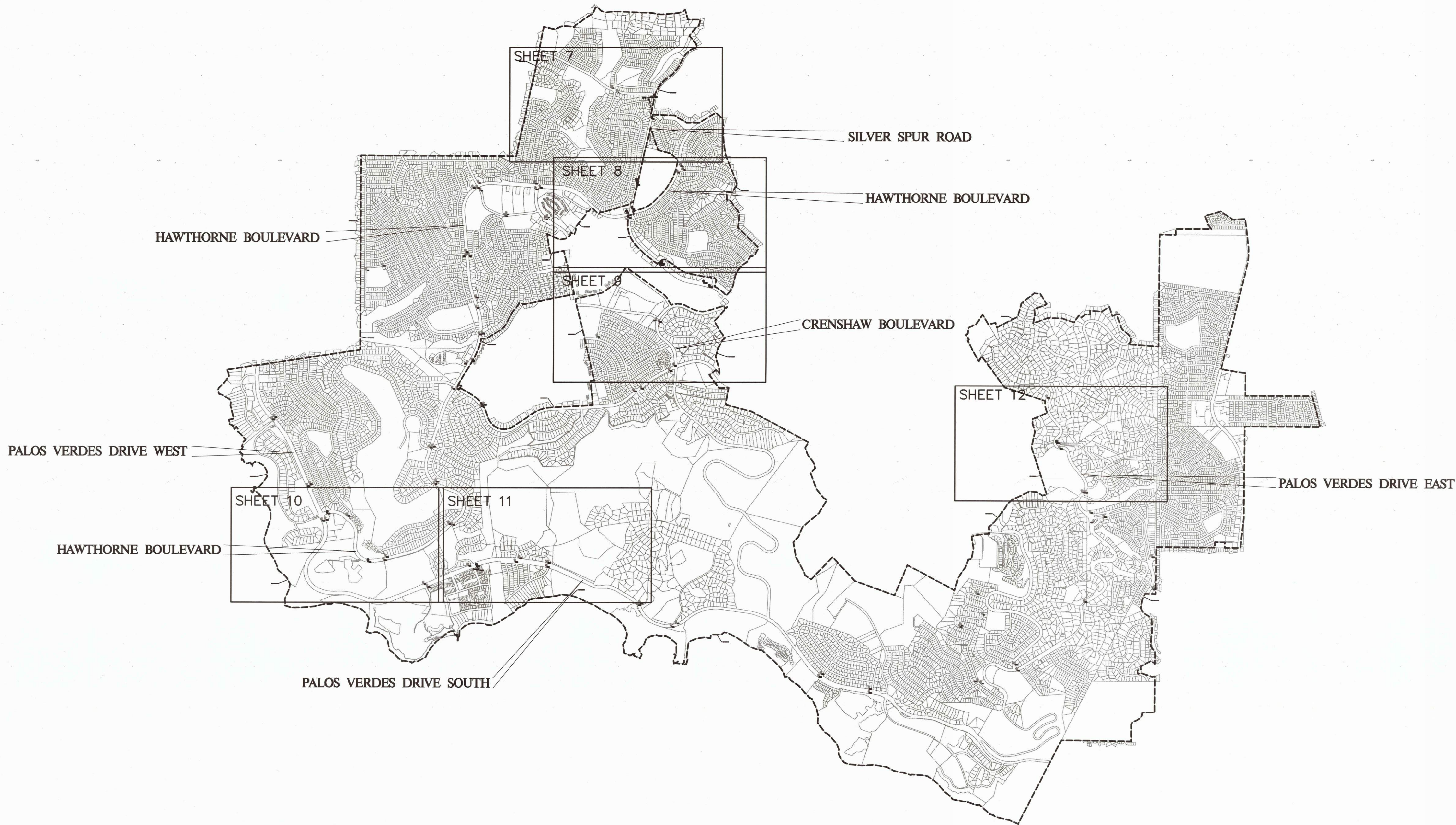


TRANSIT IMPROVEMENTS TURNOUT STATIONS PROJECT

TITLE SHEET

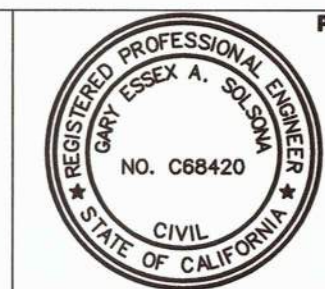
SHEET 1 OF 12

PROJECT NO. 8824



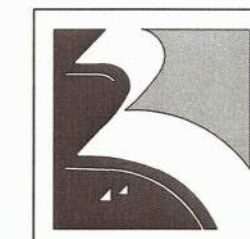
NO.		DATE	DESCRIPTION	APPROVED
			REVISIONS	

DESIGNED	KR
DRAWN	SM
CHECKED	GS
DATE	1/30/19



PLANS PREPARED BY:
Cannon
1000 10th Street, Suite 100
Palos Verdes, CA 90274
GARY ESSEX A. SISKIN, P.E. C68420
DATE 1/16/19

CITY OF RANCHO PALOS VERDES



TRANSIT IMPROVEMENTS TURNOUT STATIONS PROJECT

KEY MAP

SHEET 2 OF 12

PROJECT NO. 8824

WORK SUMMARY

Stop Number	Sheet Number	Street	Direction	Cross Street	Observed Utilities	Utility Description (see sheet 1 for owners)	Pad Improvements	Landing Improvements	Shelter Improvements	Bench Improvements	Trash Can Improvements	Curb Ramp Improvement	Turnout Improvements	Comments for Contractor (See note 4)
01SS	7	Silver Spur	southbound	Willow Wood (relocated to Montemalaga)	Y	(@ Montemalaga) Storm Drain, Cabinets, Power Pole	Y	Y	Y	Y	Y	Y	N	Relocate as to Montemalaga as shown in plans & specs.
03A	7	Silver Spur	northbound	Elkmont	Y	Vault, EPB, Power pole	Y	Y	L	R	N	R	N	Steep grade, replace sidewalk to install leveling wedge.
04A	8	Silver Spur	westbound	Hawthorne (PVPHS)	Y	Power pole, Guy wire, Valve box, Sidewalk underdrains	N	N	Y	Y	R	N	N	
05A	8	Silver Spur	northbound	Basswood	Y	CB, MH, PB	Y	N	Y	Y	Y	Y	N	
05SS	8	Silver Spur	northbound	Hawthorne	Y	White USA markings at gutter, Valve Boxes	Y	N	Y	Y	Y	N	N	
06A	8	Silver Spur	southbound	Basswood	Y	Light, PB, Cell, Irrigation, White USA markings	Y	Y	L	R	N	R	N	
06SS	8	Silver Spur	southbound	Hawthorne	N		Y	Y	Y	Y	Y	N	N	Protect large trees in planter in place. Replace all disturbed irrigation.
09SS	8	Silver Spur	northbound	Drybank	Y	CB, Vault, WMB, EPB, IRR, FDCC, Traffic loops, Sidewalk underdrains	Y	Y	Y	Y	Y	R	N	Protect existing tree.
11SS	8	Silver Spur	southbound	Drybank for PVPTA 225 line	Y	Sidewalk underdrain, 2 Valve Boxes, White USA markings	Y	N	Y	R	Y	R	N	
12SS	11	Silver Spur	southbound	Beechgate	Y	Cabinet, Vault, Street light & boxes, Valve	Y	Y	Y	Y	Y	Y	N	Construct pad outside of crosswalk. Replace disturbed irrigation.
13SS	11	Silver Spur	northbound	Beechgate	Y	CB, White USA markings, Sidewalk underdrain	Y	N	Y	R	Y	N	N	
45A	14	Hawthorne	northbound	City Hall	N		N	N	L	N	N	N	N	Replace windshields on existing shelter and install solar lighting.
47A	14	Hawthorne	northbound	PVDW	Y	Valve Box	N	N	L	R	N	N	N	
64A	15	PVDS	eastbound	Seahill	Y	EPB, Valve box, SDCB	Y	Y	R	Y	Y	N	N	Remove existing shelter and install new bench on east side of intersection. Place start of PCC pad at ECR.
94A	19	PVDE	northbound	Marion Dr.	N		N	Y	R	R	R	N	N	Remove existing shelter and install new shelter at back of walk. See note 5.

LEGEND:

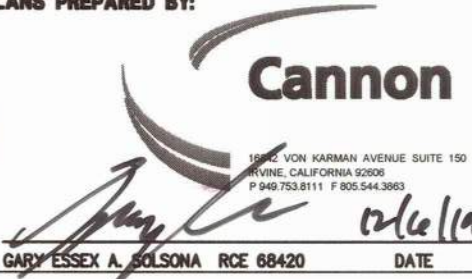
Y =	INSTALL IMPROVEMENT PER DETAIL.
N =	EXISTING CONDITION TO REMAIN.
R =	REMOVE EXISTING IMPROVEMENT AND INSTALL NEW PER DETAIL.
ND =	NO DETECTABLE WARNING SURFACE ON EXISTING CURB RAMP.
NS =	EXISTING CURB RAMP DOES NOT MEET CURRENT STANDARDS.
TL =	EXISTING TRAFFIC LOOP, SEE NOTE 2.
L =	RETROFIT EXISTING SHELTER WITH SOLAR LIGHTING PER STANDARD DETAIL PROVIDED AS PART OF THE SPECIFICATION PACKAGE.
OBSERVED UTILITIES COLUMN:	
Y =	EXISTING SURFACE UTILITIES OBSERVED.
	CONTRACTOR TO PROTECT ALL UTILITIES IN PLACE OR ADJUST AS NEEDED.
N =	NO SURFACE UTILITIES OBSERVED.

NOTES

1. UTILITIES RESEARCH IS LIMITED TO FIELD OBSERVATION OF SURFACE UTILITIES ONLY. RESEARCH DOES NOT INCLUDE BELOW GRADE UTILITY RESEARCH.
2. EXISTING STRIPING, TRAFFIC LOOPS AND ACCESS RAMPS IMPACTED BY PROPOSED IMPROVEMENTS SHALL BE REPLACED IN KIND.
3. EXISTING MONUMENTS DAMAGED DUE TO CONSTRUCTION SHALL BE REPLACED IN KIND. NO MONUMENTS EXPECTED TO BE DAMAGED.
4. SEE SPECIFICATION APPENDIX FOR PHOTOS, ADDITIONAL HORIZONTAL CONTROL AND OTHER SITE SPECIFIC DETAIL REQUIRED FOR EACH STOP LOCATION.
5. FOR STOP #4A PERMISSION TO ACCESS PRIVATE PROPERTY TO REMOVE EXISTING SHALL BE COORDINATED WITH THE CITY.
6. REPLACE ALL DISTURBED IRRIGATION.

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED KR
DRAWN SM
CHECKED GS
DATE 1/30/19

**PLANS PREPARED BY**

CITY OF RANCHO PALOS VERDES



TRANSIT IMPROVEMENTS TURNOUT STATIONS PROJECT

TABLE BY NUMBER

SHEET 3 OF 12

PROJECT NO. 8824

WORK BY IMPROVEMENT

Pad Improvements- See detail 1 for typical bus stop layout.

Stop Number	Street	Cross Street	Pad Improvements
01SS	Silver Spur	Willow Wood (relocated to Montemalaga)	Y
03A	Silver Spur	Elkmont	Y
05A	Silver Spur	Basswood	Y
05SS	Silver Spur	Hawthorne	Y
06A	Silver Spur	Basswood	Y
06SS	Silver Spur	Hawthorne	Y
09SS	Silver Spur	Drybank	Y
11SS	Silver Spur	Drybank for PVPTA 225 line	Y
12SS	Silver Spur	Beechgate	Y
13SS	Silver Spur	Beechgate	Y
64A	PVDS	Seahill	Y
Grand Total (Y):			11

Landing Improvements - See detail 1 for typical bus stop layout.

Stop Number	Street	Cross Street	Landing Improvements	Sidewalk Improvement Length (LF)	Sidewalk Improvement Width (LF)	Sum of Sidewalk Improvement Area (SF)
01SS	Silver Spur	Willow Wood (relocated to Montemalaga)	Y	40	9	360
03A	Silver Spur	Elkmont	Y	10	4	40
06A	Silver Spur	Basswood	Y	15	10	150
06SS	Silver Spur	Hawthorne	Y	15	9	135
09SS	Silver Spur	Drybank	Y	40	10	400
12SS	Silver Spur	Beechgate	Y	48	9	432
64A	PVDS	Seahill	Y	40	7	280
94A	PVDE	Marion Dr.	Y	40	8	320
Grand Total (SF):						2117

Proposed Curb Ramp Improvements - Construct PCC curb ramp per Caltrans Std Plan A88A, case per table below, and per specifications.

Stop Number	Street	Cross Street	Intersection corner	Existing Ramp Condition	Curb Ramp Improvement	Cal Trans Std. A88A Case
01SS	Silver Spur	Willow Wood (relocated to Montemalaga)	NW	NONE EX.	Y	CASE B
03A	Silver Spur	Elkmont	SE	ND, NS	R	CASE B
05A	Silver Spur	Basswood	SE	ND, NS, TL (Qty 6 EA)	Y	CASE B
06A	Silver Spur	Basswood	NW	ND, NS, TL (Qty 8 EA)	R	CASE A
09SS	Silver Spur	Drybank	NE	ND, NS, TL (Qty 12 EA)	R	CASE A
11SS	Silver Spur	Drybank for PVPTA 225 line	SW	ND, NS, TL (Qty 12 EA)	R	CASE B
12SS	Silver Spur	Beechgate	SE	NONE EX.	Y	CASE B
Grand Total (Y):					3	
Grand Total (R):					4	
Grand Total (TL):				38		
Grand Total (CASE A):						2
Grand Total (CASE B):						5



Shelter, Bench and Trash Can Improvements - See detail 1 for typical bus stop layout

Stop Number	Street	Cross Street	Shelter Improvements	Bench Improvements	Trash Can Improvements
01SS	Silver Spur	Willow Wood (relocated to Montemalaga)	Y	Y	Y
03A	Silver Spur	Elkmont	L	R	N
04A	Silver Spur	Hawthorne (PVPHS)	Y	Y	R
05A	Silver Spur	Basswood	Y	Y	Y
05SS	Silver Spur	Hawthorne	Y	Y	Y
06A	Silver Spur	Basswood	L	R	N
06SS	Silver Spur	Hawthorne	Y	Y	Y
09SS	Silver Spur	Drybank	Y	Y	Y
11SS	Silver Spur	Drybank for PVPTA 225 line	Y	R	Y
12SS	Silver Spur	Beechgate	Y	Y	Y
13SS	Silver Spur	Beechgate	Y	R	Y
47A	Hawthorne	PVDW	L	R	N
64A	PVDS	Seahill	R	Y	Y
94A	PVDE	Marion Dr.	R	R	R
Grand Total (Y):			9	8	9
Grand Total (R):			2	6	2
Grand Total (L):			3		
Grand Total (N):			0	0	3

NOTES:

1. UTILITIES RESEARCH IS LIMITED TO FIELD OBSERVATION OF SURFACE UTILITIES ONLY. RESEARCH DOES NOT INCLUDE BELOW GRADE UTILITY RESEARCH.
2. EXISTING STRIPING, TRAFFIC LOOPS AND ACCESS RAMPS IMPACTED BY PROPOSED IMPROVEMENTS SHALL BE REPLACED IN KIND.
3. EXISTING MONUMENTS DAMAGED DUE TO CONSTRUCTION SHALL BE REPLACED IN KIND. NO MONUMENTS EXPECTED TO BE DAMAGED.
4. SEE SPECIFICATION APPENDIX FOR PHOTOS, ADDITIONAL HORIZONTAL CONTROL AND OTHER SITE SPECIFIC DETAIL REQUIRED FOR EACH STOP LOCATION.
5. FOR STOP 94A PERMISSION TO ACCESS PRIVATE PROPERTY TO REMOVE EXISTING SHELTER SHALL BE COORDINATED WITH THE CITY.
6. REPLACE ALL DISTURBED IRRIGATION.

LEGEND:	
Y =	INSTALL IMPROVEMENT PER DETAIL.
N =	EXISTING CONDITION TO REMAIN.
R =	REMOVE EXISTING IMPROVEMENT AND INSTALL NEW PER DETAIL.
ND =	NO DETECTABLE WARNING SURFACE ON EXISTING CURB RAMP.
NS =	EXISTING CURB RAMP DOES NOT MEET CURRENT STANDARDS.
TL=	EXISTING TRAFFIC LOOP, SEE NOTE 2.
L =	RETROFIT EXISTING SHELTER WITH SOLAR LIGHTING PER STANDARD DETAIL PROVIDED AS PART OF THE SPECIFICATION PACKAGE.
OBSERVED UTILITIES COLUMN:	
Y=	EXISTING SURFACE UTILITIES OBSERVED.
	CONTRACTOR TO PROTECT ALL UTILITIES IN PLACE OR ADJUST AS NEEDED.
N=	NO SURFACE UTILITIES OBSERVED.

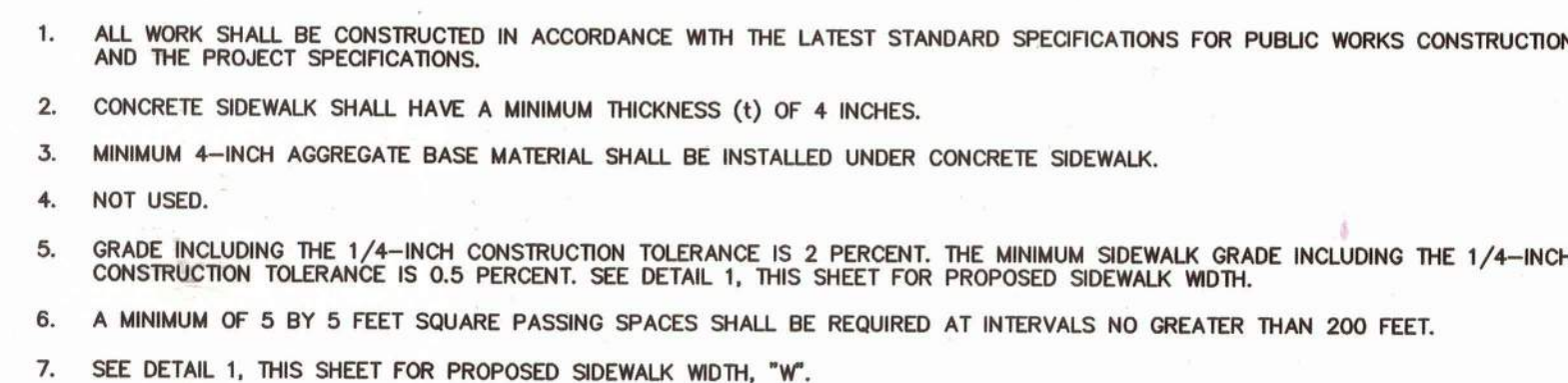
				DESIGNED	KR	  <p>PLANS PREPARED BY:</p> <p>17/6/19</p> <p>GARY ESSEX A. SOLSOLA, NO. C68420</p>	 <p>CITY OF RANCHO PALOS VERDES</p>	<p>TRANSIT IMPROVEMENTS TURNOUT STATIONS PROJECT</p> <p>TABLE BY NUMBER CONTINUED AND TABLE BY IMPROVEMENTS</p>	<p>SHEET 4 OF 12</p> <p>PROJECT NO. 8824</p>	
				DRAWN	SM					
				CHECKED	GS					
				DATE	1/30/19					
NO.	DATE	DESCRIPTION	APPROVED	REVISIONS						



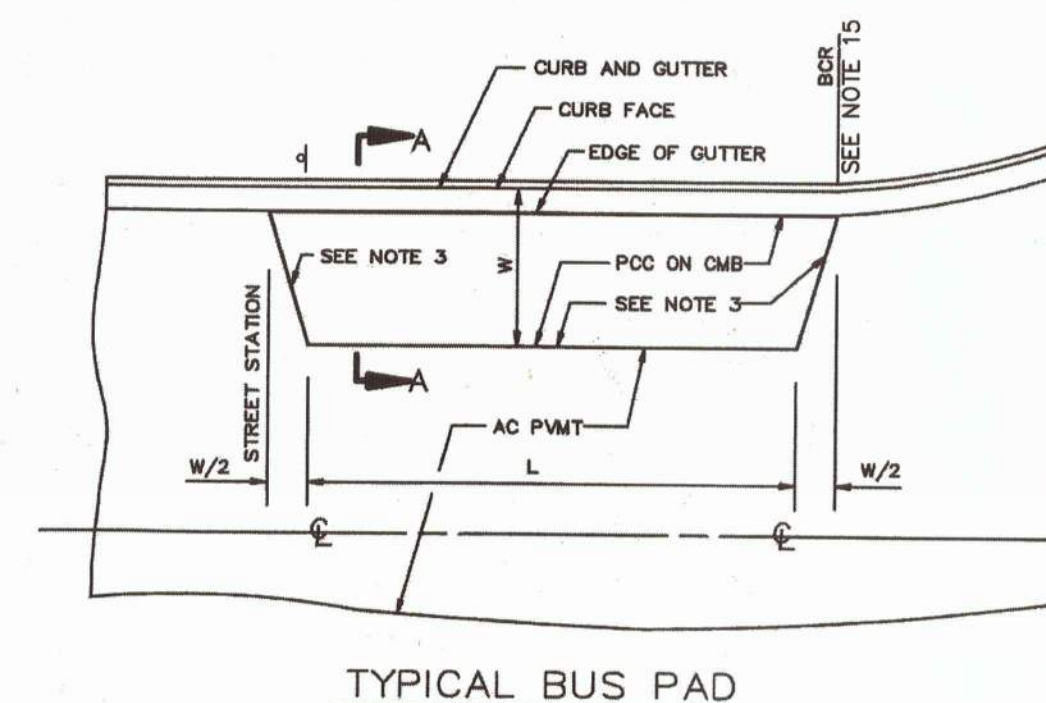
-
- BUS STOP BOARDING AREA
- REMOVE EXISTING AND INSTALL ADDITIONAL SIDEWALK PANELS ADJACENT TO PAD TO TIE IN IMPROVEMENTS AS NEEDED. NOTIFY ENGINEER IF CONFLICT WITH EXISTING CONNECTION TO SIDEWALK EXISTS, TYP.
- Bus Stop Sign
- 2
- 1
- 8' minimum
see note 4
- 34' minimum
see note 4
- Curbside
- Sidewalk Width Varies see note 4
- CURBSIDE

- 1) The minimum sidewalk/pathway width should be 48" wide. INSTALL PER DETAIL 3, THIS SHEET.
- 2) When the existing sidewalk is less than 8 feet wide, it should be widened accordingly to meet current ADA standards for accommodating both a front and rear door wheelchair lift. Wheelchair boarding areas should be constructed with either P.C.C. or A.C. pavement. Above grade obstacles, or street furniture should be placed in such a manner as to not interfere with the designated front or rear door boarding areas.
- 3) NOT USED.
- 4) SEE LANDING IMPROVEMENTS TABLE ON SHEET 4 FOR APPROXIMATE WIDTH AND LENGTH. WHERE EXISTING ADJACENT SIDEWALK IS GREATER THAN OR EQUAL TO 8' WIDE, MAINTAIN EXISTING WALK WIDTH.

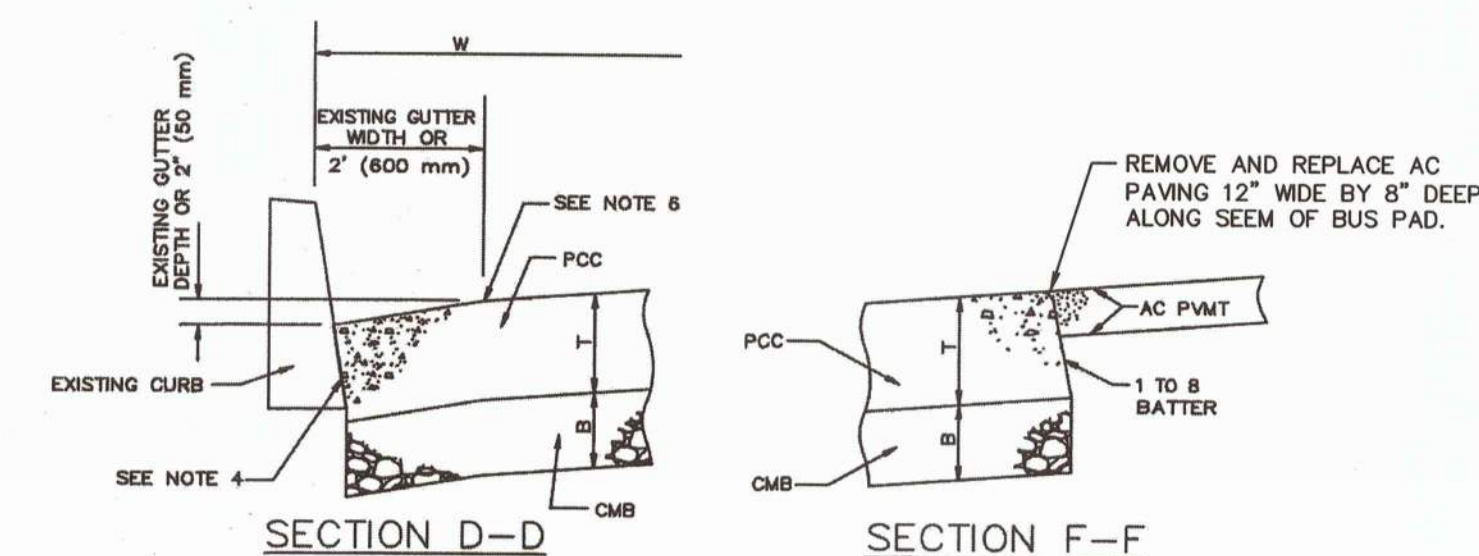
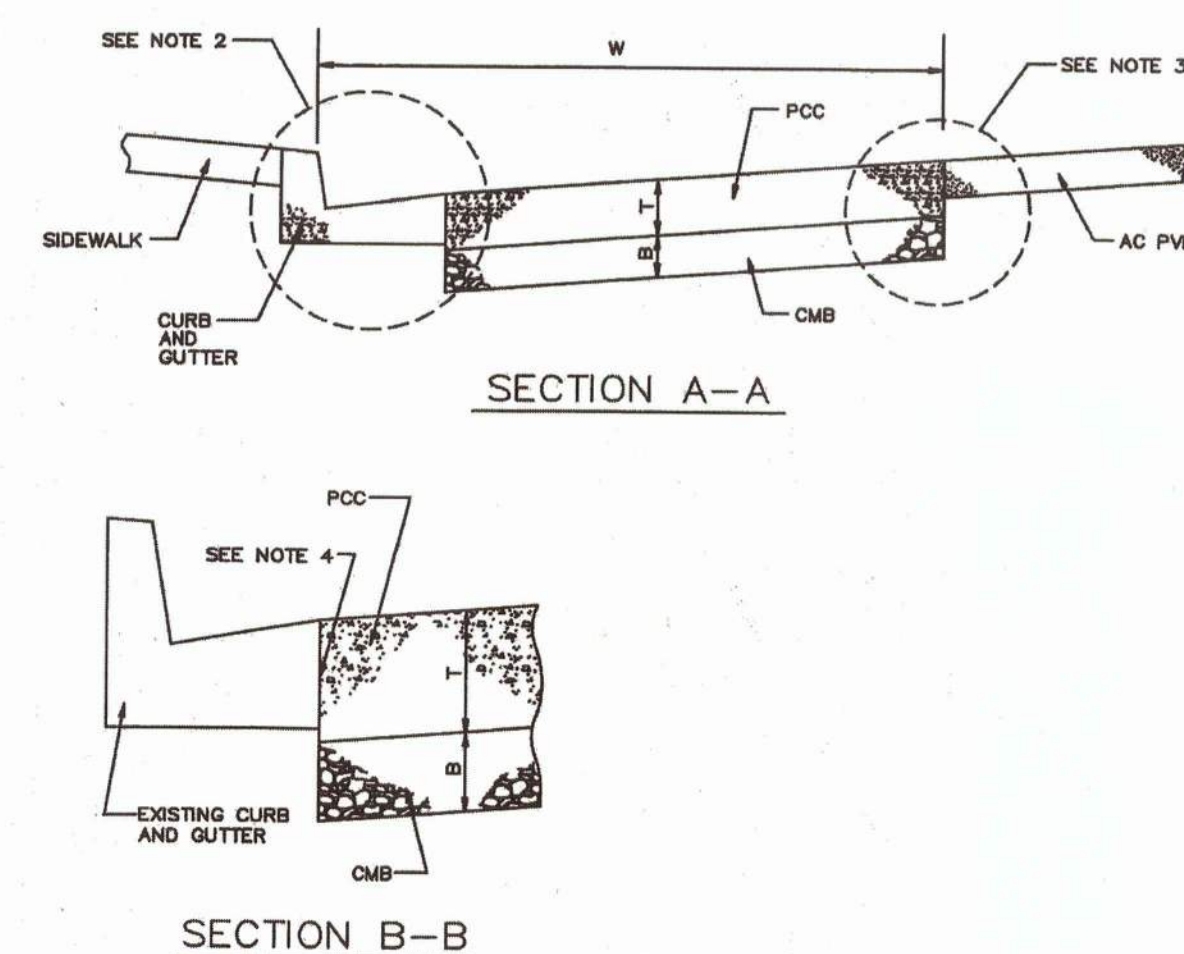
BUS LANDING 2



SIDEWALK 3



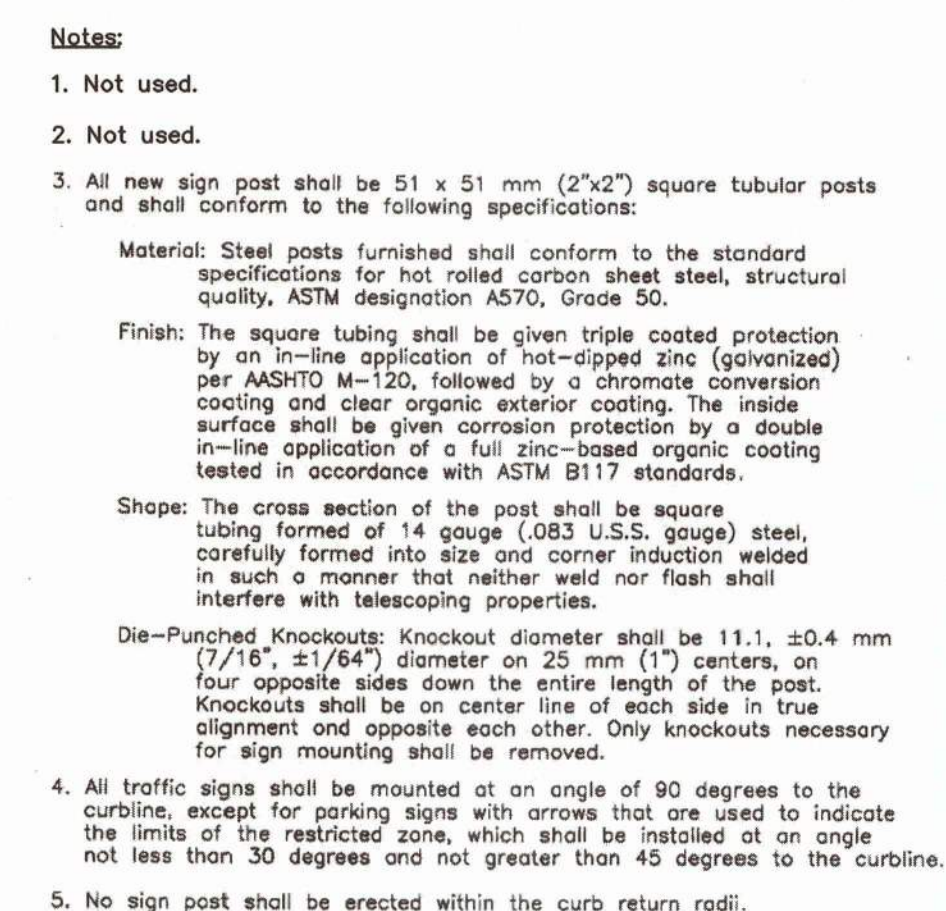
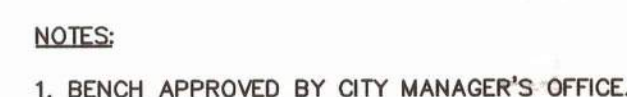
SECTION A-A



1. DIMENSIONS: (UNLESS OTHERWISE SHOWN)
L = 85' T = 8'
W = 10' B = 6'
2. USE SECTION B-B FOR EXISTING CURB AND GUTTER THAT IS TO REMAIN.
USE SECTION D-D FOR EXISTING CURB AND GUTTER THAT IS TO REMAIN.
USE SECTION F-F FOR EXISTING AC PAVEMENT.
3. AT LOCATIONS WHERE PCC PAVEMENT WILL ABUT EXISTING CONCRETE, AN EPOXY APPROVED BY THE ENGINEER SHALL BE APPLIED TO THE EXISTING CONCRETE SURFACES PRIOR TO CONCRETE PLACEMENT.
4. CONSTRUCT LONGITUDINAL WEAKENED-PLANE JOINT TO MATCH ADJOINING EXISTING GUTTER WIDTH, OR 2" IF NO ADJOINING GUTTER EXISTS.
5. USE 2"x4" HEADER TO JOIN 3-1/2" STEP. TOP OF HEADER SHALL BE SET TO LINE AND GRADE.
6. ALL EXPOSED PCC CORNERS SHALL BE ROUNDED WITH A 1/2" RADIUS.
7. SURFACE OF CONCRETE SHALL HAVE A ROUGH TRANSVERSE BROOM FINISH.
8. WHERE DESIGNATED BY THE ENGINEER, UNDESIRABLE SUBGRADE MATERIAL SHALL BE REMOVED AND REPLACED WITH C&G.
9. WHERE NEW CURB AND GUTTER IS CONSTRUCTED ADJACENT TO EXISTING SIDEWALK, SIDEWALK SHALL BE REMOVED AND REPLACED TO NEAREST SCORELINE.
10. CONSTRUCT TRANSVERSE WEAKENED PLANE JOINTS IN BUS PAD PAVEMENT AT APPROX. 10' INTERVALS.
11. CONSTRUCT TRANSVERSE WEAKENED PLANE JOINTS IN BUS PAD PAVEMENT AT ALL ADJOINING EXISTING C&G / CURB AND GUTTER CONSTRUCTION JOINTS AND WEAKENED-PLANE JOINTS.
12. AT THE OPTION OF THE ENGINEER, THE EXISTING PAVEMENT MAY BE NEATLY SAWCUT ALONG THE DIMENSIONS OF THE BUS PAD, AND CONCRETE POURED DIRECTLY USING THE EXISTING PAVEMENT AS A FORM. THE CONCRETE EDGES SHALL BE ROUNDED WITH A 1/2" RADIUS.
13. BUS PAD SHOULD END BEFORE THE CROWSWALK TO PREVENT LATERAL OR LONGITUDINAL PAVEMENT SEAMS IN THE CROWSWALK. IF A BUS PAD MUST BE EXTENDED INTO THE CROWSWALK, IT SHOULD EXTEND ACROSS THE FULL WIDTH OF THE CROWSWALK TO PREVENT WHEELCHAIRS FROM ENCOUNTERING SEAMS BETWEEN CONCRETE AND ASPHALT.

CONCRETE BUS PAD 4
N.T.S.

PROJECT NO. 8824



N.T.S

N.T.S. (5)

13'-0 1/2"

1'-6"

7'-6"

12"

69"

60 1/2"

1/4" CLEAR POLYCARBONATE

12"

69"

60 1/2"

1/4" CLEAR POLYCARBONATE

4'-10 1/2"

4'-10 1/2"

10'-6"

CLAY MAXI TILE
SPANISH TILE
18GA. GALV. ROOF SKIN

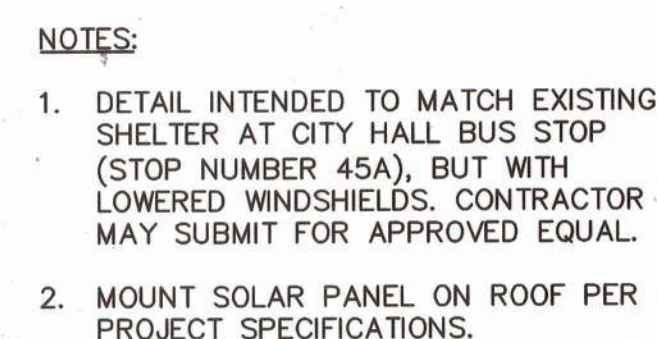
2" X 4" X 1/8"
ALUMINUM ROOF
CONSTRUCTION

4" X 4" X 1/8"
ST. SQ. TUBES
HORIZONTALS

4" X 4" X 3/16"
ST. SQ. TUBES
COLUMNS

CUSTOM FABRICATED ALUMINUM
BOLLARD -

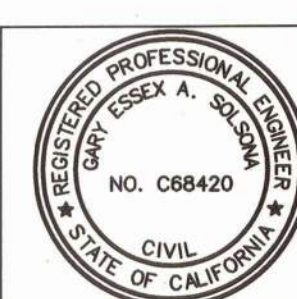
ZINC RICH PRIMER
COLOR: BR-47 RUST
WITH TIGER DRYLAC GRAFFITI
RESISTANT COATING, OR
APPROVED EQUAL.



NTS (8)

NO.	DATE	DESCRIPTION		APPROVE
REVISIONS				

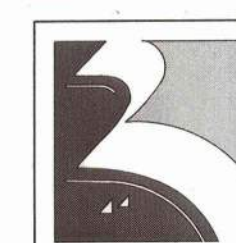
DESIGNED	KR
DRAWN	SM
CHECKED	GS
DATE	1/30/19



PLANS PREPARED BY:



CITY OF RANCHO PALOS VERDES



TRANSIT IMPROVEMENTS TURNOUT STATIONS PROJECT

SHEET 6 OF 12

DETAILS

PROJECT NO. 8824

SEE SHEET 7



LEGEND



— BUS STOP #

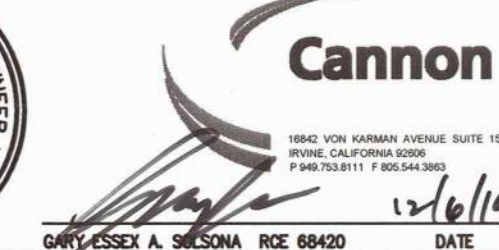
1X EXISTING BUS STOP. SEE TABLES ON SHEETS 3 AND 4 FOR LOCATION AND IMPROVEMENT TYPE.

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

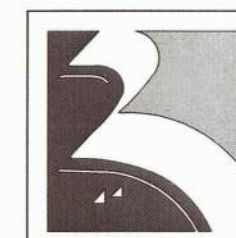
DESIGNED	<u>KR</u>
DRAWN	<u>SM</u>
CHECKED	<u>GS</u>
DATE	<u>1/30/19</u>



PLANS PREPARED BY:



CITY OF RANCHO PALOS VERDES

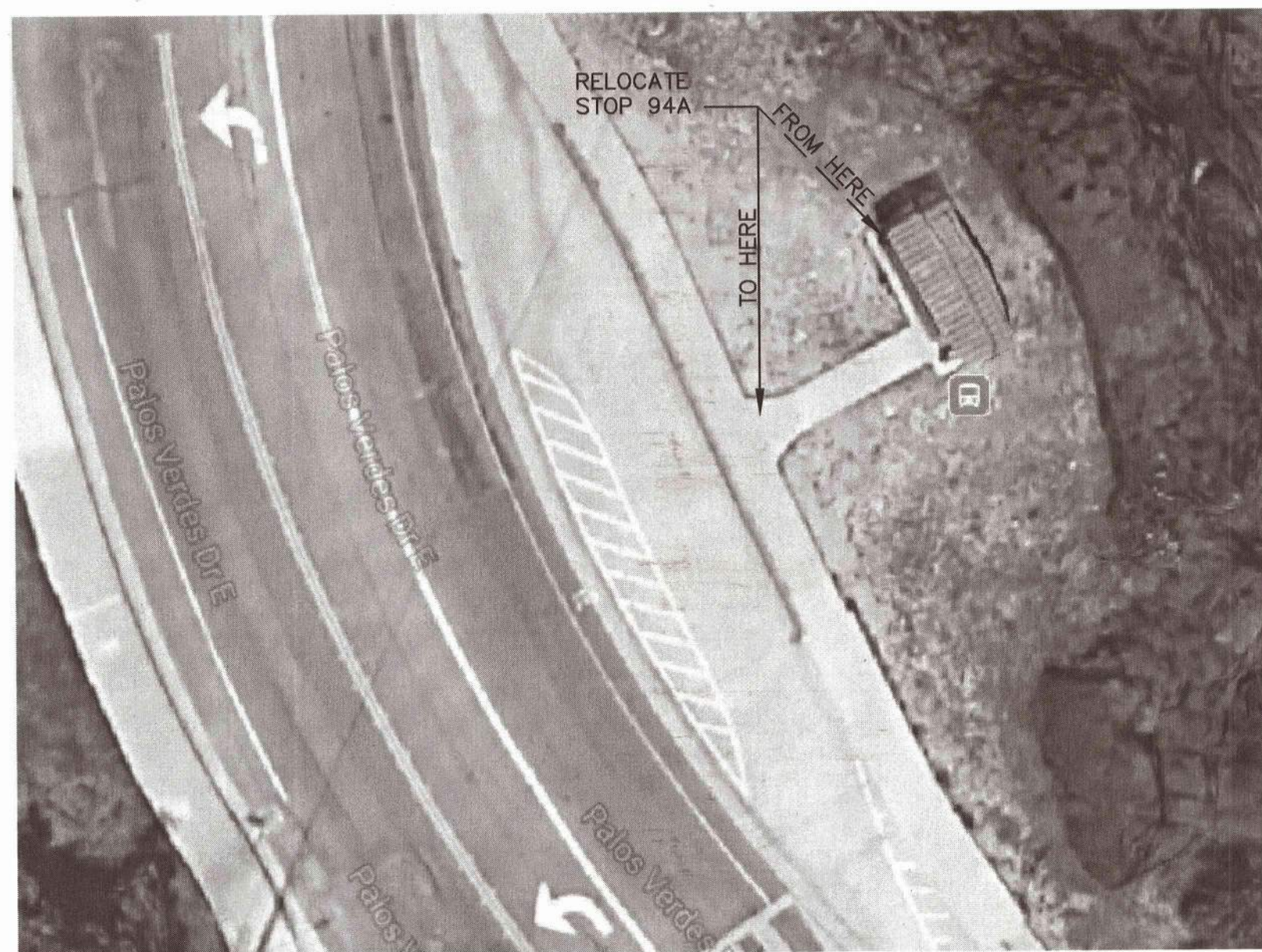


TRANSIT IMPROVEMENTS TURNOUT STATIONS PROJECT

BUS STOP LOCATION MAP

SHEET 8 OF 12

PROJECT NO. 8824



STOP NUMBER 94A DETAIL
NTS

SEE PROPOSED
RELOCATION HEREON

MARION DR

94A

CLAVIS RD

PALOS VERDES DR EAST

PICARDIE RD

VIA CANADA

VIA DE ANZAR

VIA CANADA

EL TESORO

SPARTA

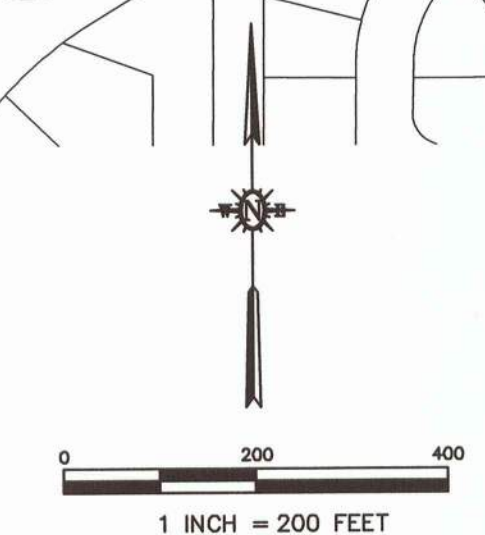
VIA VELARDO

NANCY RD

CITY BOUNDARY

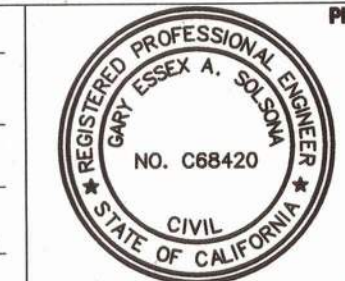
LEGEND

- 1X BUS STOP #
EXISTING BUS STOP. SEE TABLES ON SHEETS 3
AND 4 FOR LOCATION AND IMPROVEMENT TYPE.



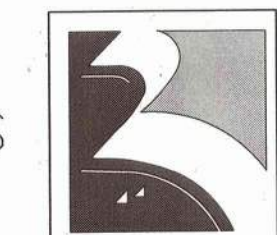
NO.	DATE	DESCRIPTION	APPROVED

DESIGNED	KR
DRAWN	SM
CHECKED	GS
DATE	1/30/19



PLANS PREPARED BY:
Cannon
12/6/19
DATE

CITY OF RANCHO PALOS VERDES



TRANSIT IMPROVEMENTS TURNOUT STATIONS PROJECT

BUS STOP LOCATION MAP

SHEET 12 OF 12

PROJECT NO. 8824